

No. 704,352.

Patented July 8, 1902.

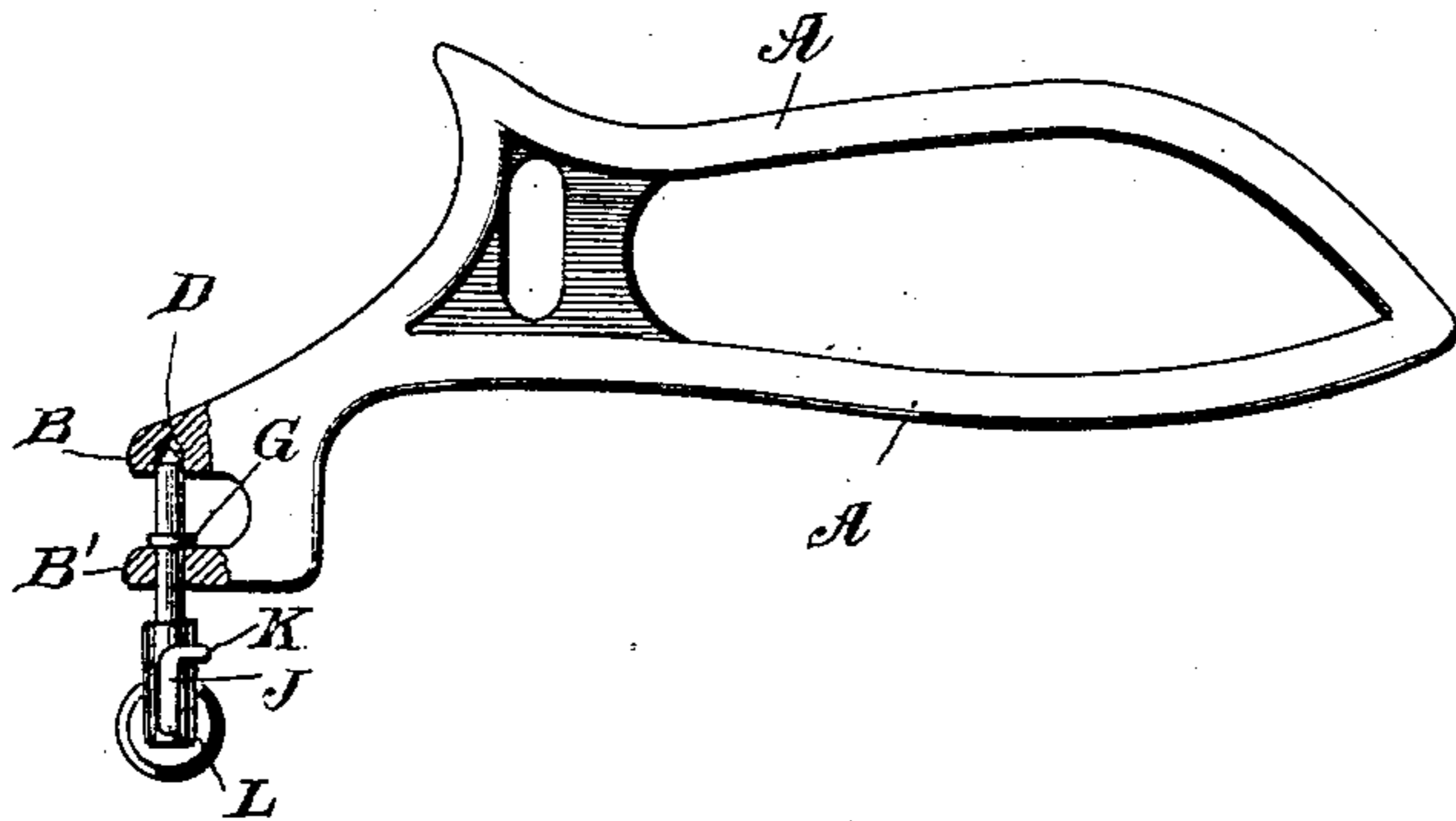
J. MATHEIN.

REVOLVING TRIMMER FOR PHOTOGRAPHIC PRINTS.

(Application filed Mar. 18, 1902.)

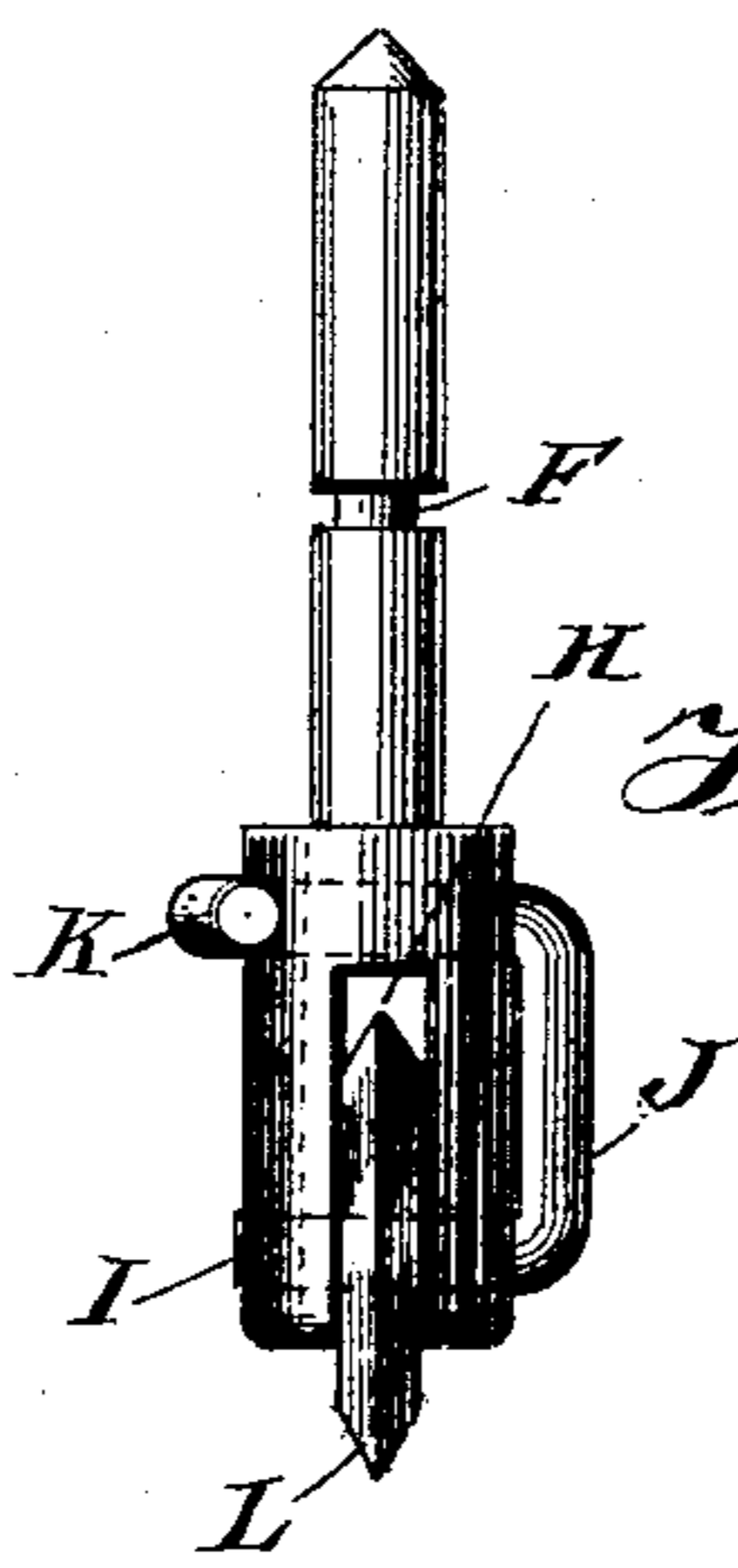
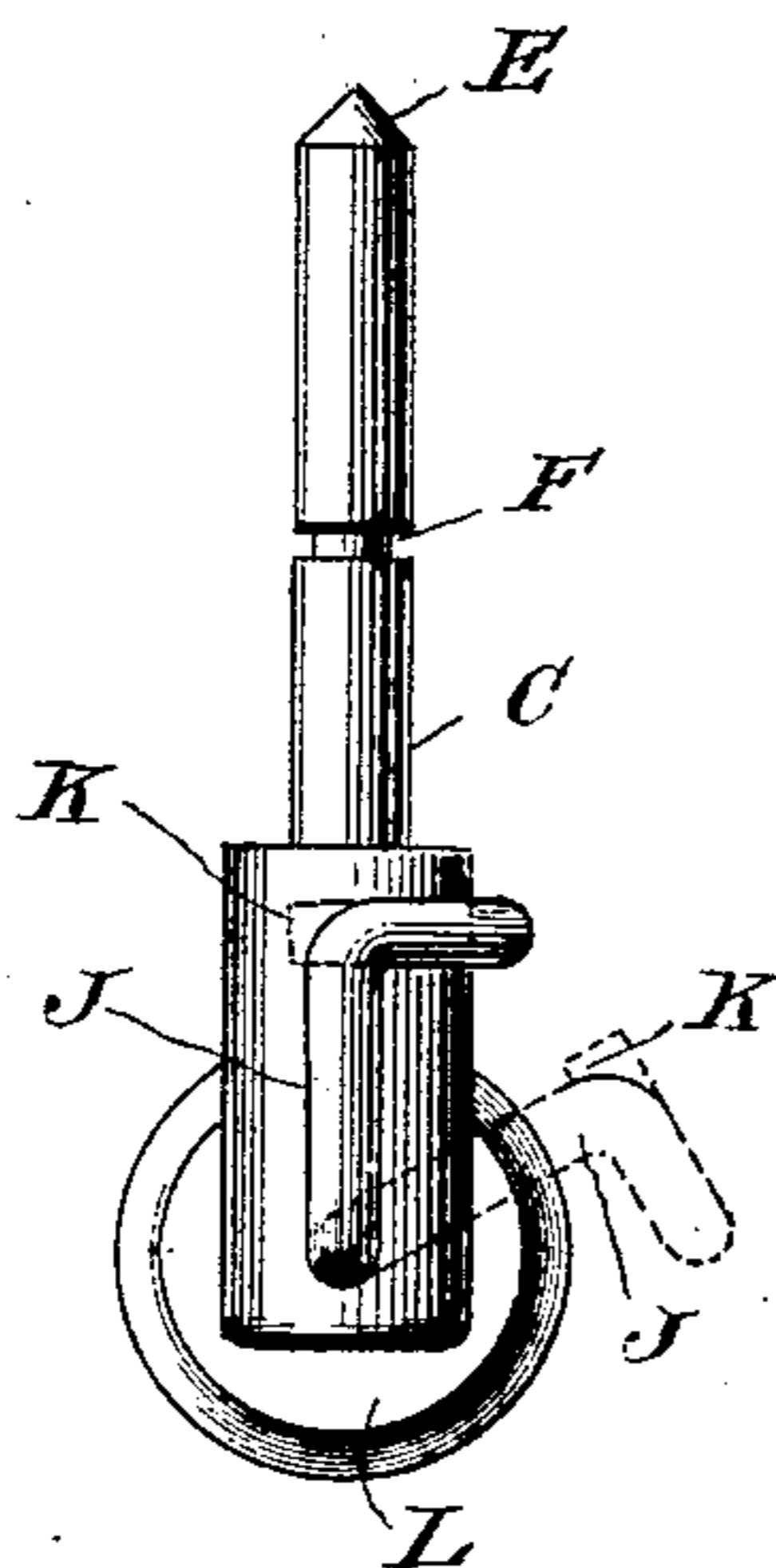
(No Model.)

*Fig. 1.*



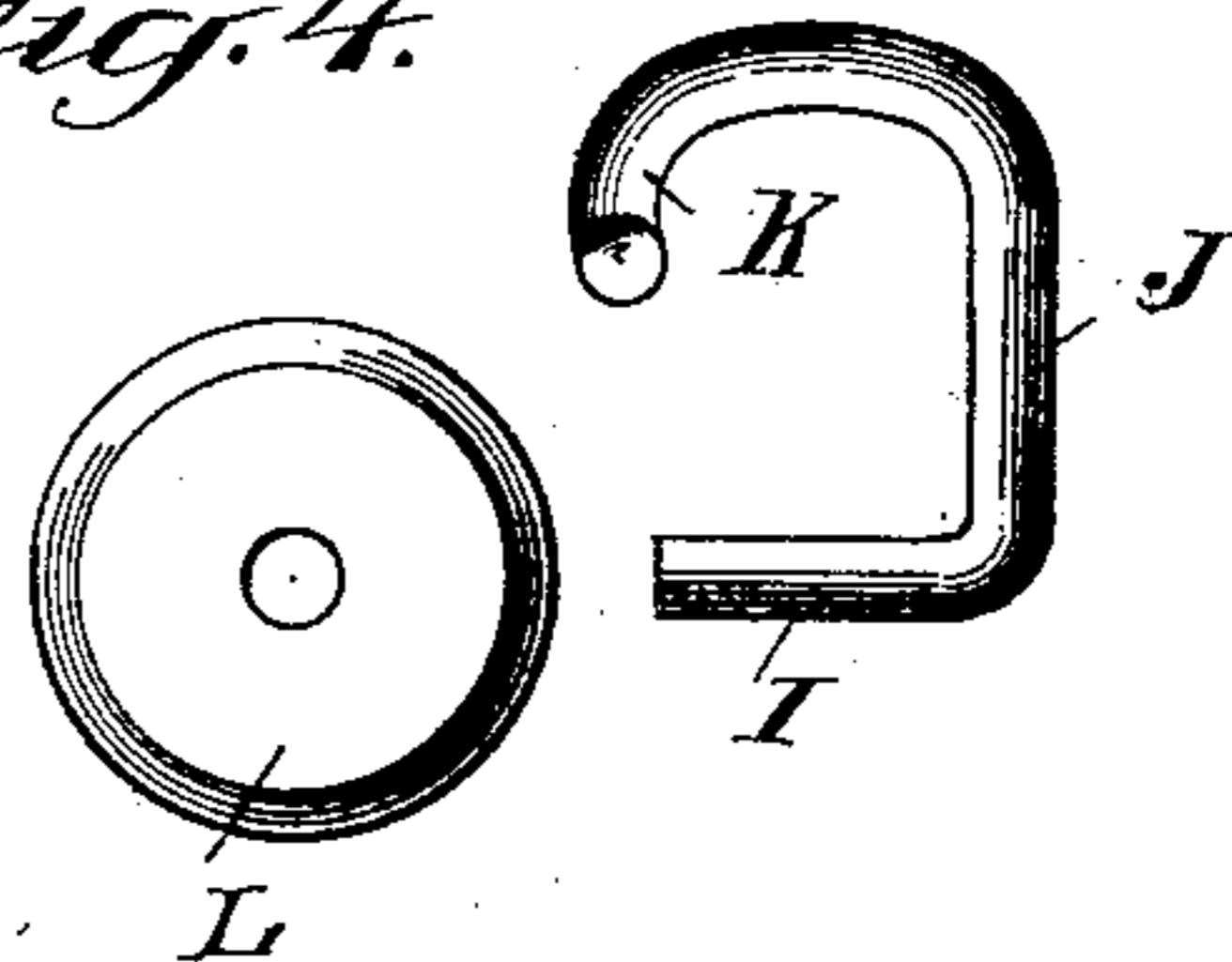
*Fig. 2.*

*Fig. 3.*



*Fig. 4.*

*Fig. 5.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOSEF MATHEIN, OF BOLTON, CONNECTICUT, ASSIGNOR TO THE ANTHONY & SCOVILL COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## REVOLVING TRIMMER FOR PHOTOGRAPHIC PRINTS.

SPECIFICATION forming part of Letters Patent No. 704,352, dated July 8, 1902.

Application filed March 18, 1902. Serial No. 98,778. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEF MATHEIN, a citizen of the United States, and a resident of Bolton, Tolland county, State of Connecticut, have invented a certain new and useful Improvement in Revolving Trimmers for Photographic Prints, of which the following is a full, clear, and exact specification, reference being had to the accompanying drawings, in which—

Figure 1 illustrates a side elevation of the invention, partly in section. Fig. 2 is a side elevation of the cutter and the spindle upon which it is mounted, showing the improvement here in question. Fig. 3 is a front elevation of the parts shown in Fig. 2. Fig. 4 is a side view of the cutter. Fig. 5 is a front view of the new axis upon which the cutter rotates.

As these devices have heretofore been made the revolving cutters have been fastened in the end of the spindle by means of a cross pivot or axis, the ends of which have been riveted to hold it in place. The cutters speedily become dull, because it is necessary to trim the prints upon a hard surface in order to get a good smooth finish to the edge, and the surface has usually been metal or glass. As soon as the keenness of the edge of the revolving cutter is lost it is difficult, and in the hands of an ordinary operator impossible, to trim the prints with the smoothness and accuracy necessary to secure the desired finish. The consequence has been that the users of these implements, as well as the manufacturers and dealers, are subject to continual annoyance by reason of the necessity of getting the extra parts and also because of the mechanical operation required to take out the old dull disks and substitute a sharp one. The end of the riveted pivot or axis has usually to be filed off and then driven back by suitable tools and a new disk cutter and rivet substituted therefor, thus making a mechanical operation of such a character that not every one is competent to perform it. Thus usually the services of a mechanic have to be called in. Under my present invention all of these objections are obviated, and in or-

der that its advantages may be fully availed of at the time of sale of the implement a suitable number of additional sharpened disks may be sold with the implement, so that as soon as one becomes dull the new spring-axis may be detached from the arbor or spindle, the dull disk taken out, and a sharp one substituted whenever desired with the greatest ease and in a moment of time and by one having no mechanical experience or ability whatever. The construction is so obvious and the operation so easy that a mere child can effect the desired change.

Referring to the drawings, A illustrates one form of handle for the device. They may be made in various forms. The one shown is preferred. At its forward ends there are two projecting parts B B'. Through the latter, B', a hole is bored adapted to receive the spindle C of the cutter, and in the upper one, B, a conical recess D is made, adapted to receive the upper end E of the spindle. The spindle has a circumferential groove F made in it, in which is sprung a little wire collar G to hold the spindle in place when properly inserted in the handle, as shown.

The ring G is a piece of steel wire, which may be sprung outwardly again when it is desired to release the spindle. The lower end of the spindle is enlarged, as shown, and has a vertical slot H cut in it from its lower end. (See Fig. 3.) Thus its end is bifurcated, and through the bifurcated ends a hole is bored adapted to receive the end I of the spring-axis, which is the special subject of this invention. The axis consists of the horizontal section I and the vertical section J and a curved section K, and the construction is such that when the device is swung outwardly, as shown in dotted lines in Fig. 2, the axis-section I may be slipped readily through the holes bored in the bifurcated ends of the spindle, passing through the hole in the center of the rotary cutter L, as shown. Thereupon the spring-axis will be swung upwardly from the dotted-line position shown in Fig. 2 to the position shown in full lines in that figure and also shown in Fig. 3. During this movement the extremity of the curved

section K will strike against the rounding surface of the enlarged part of the spindle and be sprung outwardly thereby, so that some little pressure will be required to force it across the curved cylindrical surface of the enlarged part of the spindle. As soon as this is done, however, the elasticity and shape of the springy extension of the axis causes it to hug snugly upon and about the enlarged part of the spindle, whereby the axis is securely held in place.

It will be noted that the rotary disk cutter will be properly supported in rotatable position by the horizontal section I of the spring-axis, which passes through its center, and that when it becomes dull all that is necessary to substitute a sharp one is to push back the curved section K of the spring-axis from the position shown in full lines in Fig. 2 to the position shown in dotted lines, whereupon the axis may be drawn out from the spindle, thus permitting the dull disk to drop away, and that by a reversal of the said operations a new sharpened disk may be in a moment substituted for the dull one.

It may be readily seen that by my invention there is a great saving of time and trouble, and consequently material economy effected by my invention, and in addition the

implement is made much more satisfactory in use.

It will be obvious to those who are familiar with this art that modifications may be made in the details of construction and arrangement of the parts without departing from the essentials of my invention. I therefore do not limit myself to such details.

Having described the invention, I claim—

A trimmer having a spindle, the upper part of which is reduced in size and adapted to engage with the handle of the instrument and a slotted and cylindrical lower part in which the cutting-disk is mounted, said cutting-disk itself and a removable axis therefor, comprising a straight section adapted to pass through holes in the cylindrical part of the spindle and through the cutting-disk, and an elastic curved section adapted to spring about and embrace the cylindrical portion of the spindle and arranged to rest fully exposed on the exterior thereof, for the purpose set forth.

Signed at the city of New Haven this 14th day of March, 1902.

JOSEF MATHEIN.

Witnesses:

WILLIAM TRUEMAN,  
JOHN ELLIOTT.